



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,872	04/20/2001	Yasuaki Yamagishi	450100-03167	4338

20999 7590 05/02/2005  
FROMMER LAWRENCE & HAUG  
745 FIFTH AVENUE- 10TH FL.  
NEW YORK, NY 10151

EXAMINER

KIM, JUNG W

ART UNIT	PAPER NUMBER
----------	--------------

2132

DATE MAILED: 05/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/839,872

Applicant(s)

YAMAGISHI ET AL.

Examiner

Jung W. Kim

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.


**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-15 have been examined.
2. Applicant in the amendment filed on March 18, 2005 amended claims 1, 5, 6, 9, 10 and 15.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Response to Amendment***

- 
4. The objection to the title is withdrawn as the amended title is more clearly indicative of the invention to which the claims are directed.

### ***Response to Arguments***

5. Applicant's arguments filed March 18, 2005 have been fully considered but they are not persuasive.
6. Contrary to applicant's allegation that the prior art of record does not teach the newly amended limitations of the independent claims, specifically, "information which can obtain latest public key certificate information and lapse information of said latest public key certificate information are stored into said container entry and/or said leaf entry at a predetermined time interval", Micali does teach such a limitation. See col. 2:15-21; 5:43-48; 6:18-45; 7:59-65; updates to the CRL tree are made based upon a predetermined date by the CA. Hence, Micali anticipates applicant's claimed invention.

***Claim Objections***

7. Claim 6 is objected to because of the following informalities: amended claim 6 is not grammatical. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 7 and 8 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
10. Claims 7 and 8 recite the limitation "an apparatus according to claim 6". There is insufficient antecedent basis for this limitation in the claims.

***Claim Rejections - 35 USC § 102***

11. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Micali U.S. Patent No. 6,097,811 (hereinafter Micali).
12. As per claim 1, Micali teaches a transmitting apparatus for transmitting a layer structure of a directory which manages public key certificate information in a layer manner (see Micali, Abstract), comprising:

- a. managing means for making certificate authority information corresponding to a container entry which can store its own subordinate information, making end entity information correspond to a leaf entry which is under domination of the container entry and cannot store its own subordinate information, and managing a layer structure of a directory constructed by the container entry and the leaf entry (see Micali, col. 4, line 4-col. 5, line 33 and definition of root/leaf node in Merkle tree);
- b. detecting means for detecting a change of the layer structure of the directory which is managed by the managing means and obtaining differential information constructed by a difference of the change of the layer structure of the directory on the basis of a detection result (see Micali, col. 7, lines 41-65); and
- c. broadcasting means for broadcasting the differential information detected by the detecting means for reception by a plurality of several means (see Micali, col. 5, lines 15-20; col. 7, lines 52-58),
- d. wherein information which can obtain latest public key certificate information and lapse information of the latest public key certificate information are stored into the container entry and/or the leaf entry at a predetermined time interval (see Micali, col. 2, lines 15-21; col. 5, lines 43-48; col. 6, lines 18-45; col. 7, lines 59-65).

The aforementioned cover the limitations of claim 1.

13. As per claim 2, Micali teaches an apparatus as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, the lapse information is a serial number of the public key certificate information. See Micali, col. 6, lines 18-45. The aforementioned cover the limitations of claim 2.

14. As per claim 3, Micali teaches an apparatus as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, one of the latest public key certificate information and the information for obtaining the latest public key certificate information can be selected and stored in to attributes of the container entry and/or the leaf entry. See Micali, col. 5, lines 4-7. The aforementioned cover the limitations of claim 3.

15. As per claim 4, Micali teaches an apparatus as outlined above in the claim 3 rejection under 35 U.S.C. 102(e). In addition, the information which is stored into the attributes can be changed between the latest public key certificate information and the information for obtaining the latest public key certificate information in accordance with an elapsed time from an updating event in which the difference has been detected by the detecting means. See Micali, see col. 5, lines 40-47. The aforementioned cover the limitations of claim 4.

16. As per claim 5, it is a method claim corresponding to claims 1-4 and it does not teach or define above the information claimed in claims 1-4. Therefore, claim 5 is

Art Unit: 2132

rejected as being anticipated by Micali for the same reasons set forth in the rejections of claims 1-4.

17. As per claims 6-8, Micali teaches an apparatus as outlined above in the claim 1-4 rejections under 35 U.S.C. 102(e). In addition, Micali teaches a corresponding receiving apparatus comprising:

- e. receiving means for making transmitted certificate authority information correspond to a container entry, making end entity information correspond to a leaf entry, and receiving differential information comprising a difference of a change of a layer structure of a directory (see Micali, col. 5, lines 15-34; col. 7, lines 41-65);
- f. managing means for managing the layer structure of the directory constructed on the basis of the differential information received by the receiving means; and changing means for selectively fetching the differential information and changing the layer structure of the directory which is managed by the managing means (see Micali, col. 7, lines 59-65).

The aforementioned cover the limitations of claims 6-8.

18. As per claim 9, it is a method claim corresponding to claims 6-8 and it does not teach or define above the information claimed in claims 6-8. Therefore, claim 9 is rejected as being anticipated by Micali for the same reasons set forth in the rejections of claims 6-8.

19. As per claims 10-14, they are system claims corresponding to claims 1-9 and they do not teach or define above the information claimed in claims 1-9. Therefore, claims 10-14 are rejected as being anticipated by Micali for the same reasons set forth in the rejections of claims 1-9.

20. As per claim 15, it is a method claim corresponding to claims 10-14 and it does not teach or define above the information claimed in claims 10-14. Therefore, claim 15 is rejected as being anticipated by Micali for the same reasons set forth in the rejections of claims 10-14.

### ***Conclusion***

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W. Kim whose telephone number is (571) 272-3804. The examiner can normally be reached on M-F 9:00-5:00.

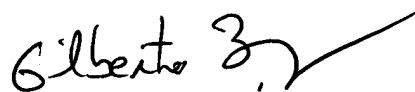
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jung W Kim  
Examiner  
Art Unit 2132

Jk  
April 27, 2005



GILBERTO BARRON JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100